Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently amended) A flexible rubber mat comprising:

   (a) a mat base having a top surface and a bottom surface;

   (b) a plurality of long legs perpendicularly attached to the bottom surface of the mat base for resiliently supporting the mat base on a floor; and

   (c) a plurality of short legs perpendicularly attached to the bottom surface of the mat base for supporting the mat base on a floor and modifying the resiliency of the mat, wherein the long legs and the short legs are adapted to provide a selected mat compression when a load is applied to the top surface of the mat such that the mat compresses as if it were constructed from a softer material.

2. (Previously presented) The mat of claim 1, further comprising a plurality of ribs wherein each said rib connects a pair of legs, wherein each said rib is positioned between the tops and bottoms of the legs to which it is connected, and wherein the length perpendicular to the mat of each said rib is approximately the length of the legs to which it is attached, but not longer than either of the legs to which it is attached, for preventing the mat from becoming embedded within a floor grating upon which it sits.

3. (Currently amended) A flexible rubber mat comprising:

   (a) a mat base having a top surface and a bottom surface; and

   (b) a plurality of channels subdividing the mat top surface into mat segments, wherein each said channel has a floor and a lateral wall surface, ~~and~~ wherein ~~the~~at least

one lateral wall surface has a drain opening positioned upon the lateral wall surface, rather than being horizontally oriented, permitting drainage from the top surface of the mat to below the bottom surface of the mat and wherein the top surface of the mat covers the drain opening.

4. (Currently amended) A flexible rubber mat comprising:

(a) a mat base having a top surface and a bottom surface;

(b) a plurality of channels subdividing the mat top surface into mat segments;

(c) a plurality of grit trenches embedded within the top surface of the mat~~, wherein each said grit trench has two open ends and each said end is bounded by a retention lip forming a dam for retaining adhesive and grit~~; and

(d) grit bonded into the trenches by an adhesive.

5. (Previously presented) A mat comprising:

(a) a mat base having a top surface and a bottom surface;

(b) a plurality of long legs perpendicularly attached to the bottom surface of the mat base for resiliently supporting the mat base;

(c) a plurality of short legs perpendicularly attached to the bottom surface of the mat base for supporting the mat base and modifying the resiliency of the mat, wherein the long legs and the short legs are adapted to provide a selected mat compression when a load is applied to the top surface of the mat;

(d) a plurality of ribs wherein each said rib connects a pair of legs and wherein the length perpendicular to the mat of each said rib is approximately the length of the legs to which it is attached, but not longer than either of the legs to which it is

attached, for preventing the mat from becoming embedded within a floor grating upon which it sits; and

(c) a plurality of channels subdividing the mat top surface into mat segments, wherein each said channel has a floor and a lateral wall surface and wherein the lateral wall surface has a drain opening permitting drainage from the top surface of the mat to below the bottom surface of the mat.

6. (Previously presented) The mat of claim 5 further comprising:

(a) a plurality of grit trenches embedded within the top surface of the mat, wherein each said grit trench has two open ends and each said end is bounded by a retention lip forming a dam for retaining adhesive and grit; and

(b) grit bonded into the trenches by an adhesive.

7. (Original) The mat of claim 6, wherein at least one grit trench is supported by some of the long legs perpendicularly attached to the bottom surface of the mat for reducing flexure within the trench.

8. (Currently amended) ~~A process for fabricating lateral drain openings into the top surface of a mat, said process~~ A process for fabricating the flexible rubber mat of claim 3 comprising:

(a) molding a mat having a top surface and a bottom surface such that channels subdivide the mat top surface into mat segments, wherein the channels have a floor and a lateral wall surface and wherein a rib is perpendicularly molded into the bottom surface of the mat below each channel; and

(b) removing material from the floor of at least one channel, at least one of its lateral

wall surfaces and its underlying rib to a depth which is below the bottom surface of the mat base, thereby forming drain openings within the lateral walls of the channels.

9. (Currently amended) The process for fabricating a flexible rubber mat of claim 8 ~~lateral drain openings into the top surface of a mat of claim 8~~, further comprising using a grooving tool having a heated blade for removing the material from the floor of each channel and its underlying rib.

10. (Currently amended) The process for fabricating a flexible rubber mat of claim 8 ~~lateral drain openings into the top surface of a mat of claim 8~~, wherein the material is removed from the floor of each channel and its underlying rib by a process comprising:

(a) attaching a grooving tool having a heated blade to a programmable cartesian robot;

(b) programming the programmable cartesian robot to remove the material from the floor of each channel and its underlying rib;

(c) securing the mat onto the workbed of the programmable cartesian robot; and

(d) removing the material from the floor of at least one channel, at least one of its lateral wall surfaces and its underlying rib with the programmable cartesian robot and the attached grooving tool.

11. (Currently amended) ~~A process for bonding grit into trenches embedded within the top surface of a mat, said process~~ A process for fabricating the flexible rubber mat of claim 4 comprising:

(a) attaching an adhesive dispenser to a programmable cartesian robot;

(b) programming the programmable cartesian robot to fill the trenches with adhesive;

(c) securing the mat onto the workbed of the programmable cartesian robot;

(d) filling the trenches with adhesive with the programmable cartesian robot;

(e) spreading grit over the top surface of the mat; and

(f) removing excess grit from the mat.

12. (Previously presented) The mat of claim 1, further comprising a plurality of ribs wherein each said rib connects a pair of long legs and wherein the length perpendicular to the mat of each said rib is approximately the length of the legs to which it is attached, but not longer than either of the legs to which it is attached, for preventing the mat from becoming embedded within a floor grating upon which it sits.

13. (Currently amended) The mat of claim 4, wherein at least one grit trench is supported by ~~some of the long~~ legs perpendicularly attached to the bottom surface of the mat for reducing flexure within the trench.

14. (Previously presented) The mat of claim 4, wherein the grit trenches are formed into X-shaped configurations.

15. (Previously presented) The mat of claim 6, wherein the grit trenches are formed into X-shaped configurations.

16. (Previously presented) The mat of claim 7, wherein the grit trenches are formed into X-shaped configurations.

17. (Previously presented) The mat of claim 1, wherein each mat base surface area of 2.25 $ft.^2$ has about 504 long legs and about 144 short legs.

18. (Canceled).

19. (New) The mat of claim 4, wherein each said grit trench has two open ends, each said end terminating at a channel and each said end being bounded by a retention lip forming a dam for retaining adhesive and grit and for inhibiting adhesive and grit from entering into a channel.

20. (New) The mat of claim 19, further comprising at least one opening between the retention lip and a wall of the channel.